

Abstract:

This invention relates to a method for fining a surface of a metal product to form crystal grains having sizes less than  $1 \mu\text{m}$  at their surfaces and the metal product produced thereby. The method is comprised of a process for forming crystal grains having sizes less than  $1 \mu\text{m}$  at the surface of the metal product by projecting or peening shots or projectiles while a power per unit of area of the surface, which power is caused by projecting or peening shots or projectiles, is controlled at a predetermined value.